CLAIMS:

1. A method of processing a projection data set of an object of interest, wherein the projection data is acquired by means of a source of electro-magnetic radiation generating a beam and by means of a radiation detector detecting the beam, the method comprising the step of:
rebinning the projection data set from a first geometry to a second geometry, resulting in a first rebinned projection data set;
wherein a second radial resolution of the first rebinned projection data set in the second geometry is higher than a first radial resolution of the projection data set in the first geometry.

2. The method of claim 1,
wherein the projection data set in the first geometry comprises a first focus data set and a second focus data set;
wherein the first focus data set is acquired at a first position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source; and
wherein the second focus data set is acquired at a second position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source.

3. The method of claim 1, further comprising the step of:
rebinning the first rebinned projection data set from the second geometry to a third geometry, resulting in a second rebinned projection data set;
wherein the second rebinned projection data set comprises a third focus data set; and
wherein a third radial resolution of the third focus data set is higher than the first radial resolution of the projection data set in the first geometry.

4. The method of claim 3,
wherein the first geometry is one of a fan-beam geometry and a cone-beam geometry;

wherein the second geometry is a parallel-beam geometry; and
wherein the third geometry is one of a fan-beam geometry and a cone-beam geometry.

5. The method of claim 3,
wherein the rebinning of the projection data set from the first geometry to the second geometry is performed by a first angular interpolation; and
wherein the rebinning of the projection data set from the second geometry to the third geometry is performed by a second angular interpolation

6. The method of claim 5,
wherein the first and second angular interpolations are performed in a direction of a view-angle with a constant fan-angle.

7. The method of claim 3, further comprising the step of:
reconstructing the object of interest by a filtered back-projection procedure;
wherein the filtered back-projection procedure is one of performed directly by using a voxel dependent magnification and performed after a further rebinning of the second rebinned projection data set from the first geometry to the second geometry without using a magnification.

8. The method of claim 1,
wherein the source of electro-magnetic radiation is a polychromatic x-ray source;
wherein the source moves along a helical path around the object of interest; and
wherein the beam has one of a fan-beam geometry and a cone-beam geometry.

9. A data processing device, comprising:
a memory for storing a data set;
a data processor for processing a projection data set of an object of interest, wherein the projection data is acquired by means of a source of electro-magnetic radiation generating a beam and by means of a radiation detector detecting the beam, wherein the data processor is adapted for performing the following operation:

rebinning the projection data set from a first geometry to a second geometry, resulting in a first rebinned projection data set;

wherein a second radial resolution of the first rebinned projection data set in the second geometry is higher than a first radial resolution of the projection data set in the first geometry.

10. Data processing device according to claim 9,

wherein the data processor is further adapted for performing the following operation:

rebinning the first rebinned projection data set from the second geometry to a third geometry, resulting in a second rebinned projection data set;

wherein the projection data set in the first geometry comprises a first focus data set and a second focus data set;

wherein the first focus data set is acquired at a first position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source; and

wherein the second focus data set is acquired at a second position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source;

wherein the second rebinned projection data set comprises a third focus data set; and

wherein a third radial resolution of the third focus data set is higher than the first radial resolution of the projection data set in the first geometry.

11. A CT scanner system, comprising:

a memory for storing a data set;

a data processor for processing a projection data set of an object of interest, wherein the projection data is acquired by means of a source of electro-magnetic radiation generating a beam and by means of a radiation detector detecting the beam, wherein the data processor is adapted for performing the following operation:

loading the projection data set;

rebinning the projection data set from a first geometry to a second geometry, resulting in a first rebinned projection data set;

wherein a second radial resolution of the first rebinned projection data set in the second geometry is higher than a first radial resolution of the projection data set in the first geometry.

12. CT scanner system according to claim 11,
wherein the data processor is further adapted for performing the following operation:
rebinning the first rebinned projection data set from the second geometry to a third geometry, resulting in a second rebinned projection data set;
wherein the projection data set in the first geometry comprises a first focus data set and a second focus data set;
wherein the first focus data set is acquired at a first position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source; and
wherein the second focus data set is acquired at a second position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source;
wherein the second rebinned projection data set comprises a third focus data set; and
wherein a third radial resolution of the third focus data set is higher than the first radial resolution of the projection data set in the first geometry.

13. A computer program for processing a projection data set of an object of interest, wherein the computer program causes a processor to perform the following operation when the computer program is executed on the processor:
loading the projection data set;
rebinning the projection data set from a first geometry to a second geometry, resulting in a first rebinned projection data set;
wherein a second radial resolution of the first rebinned projection data set in the second geometry is higher than a first radial resolution of the projection data set in the first geometry.

14. Computer program according to claim 13,
wherein the computer program causes the processor to perform the following further operation when the computer program is executed on the processor:

rebinning the first rebinned projection data set from the second geometry to a third geometry, resulting in a second rebinned projection data set;

wherein the projection data set in the first geometry comprises a first focus data set and a second focus data set;

wherein the first focus data set is acquired at a first position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source; and

wherein the second focus data set is acquired at a second position relative to the detector of a focal spot of the electro-magnetic radiation emitted from the source;

wherein the second rebinned projection data set comprises a third focus data set; and

wherein a third radial resolution of the third focus data set is higher than the first radial resolution of the projection data set in the first geometry.